



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,131	01/20/2004	Kohei Mori	SON-2896	6646
23353	7590	10/04/2005	EXAMINER	
RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			CHEN, SHIH CHAO	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,131

Applicant(s)

MORI, KOHEI

Examiner

Shih-Chao Chen

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) 1-5 and 7 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 6 and 8-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 19 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on July 19, 2005. These drawings are disapproved by Examiner because --RELATED ART-- should on FIG. 1.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Regarding claim 12, what is meant by "a second first non-feed conductor " or "each of said first and non-feed conductors"? it renders the claim indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 6, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Urakami et al. (U.S. Patent No. 5,699,071).

Regarding claim 6, Urakami et al. teaches in figures 1 and 5-14 an antenna unit, comprising: a flat antenna (2); matching control signal generating means (3) for generating a matching control signal corresponding to inputted data; and a matching

circuit (30) that is so configured that the resonant frequency of the flat antenna is made variable based on the matching control signal outputted from the matching control signal generating means, wherein: the matching circuit (30) comprises a connective circuit (31, 32) including a matching coil (13, 21) and a variable capacitance diode (17, 23), and the resonant frequency of the flat antenna (2) is variably controlled by varying the inductance of the matching coil and the capacitance of the variable capacitance diode based on the matching control signal.

Regarding claim 8, Urakami et al. teaches in figures 1 and 5-14 a broadcast reception terminal apparatus, comprising: a flat antenna (2), reception means (6) for selecting and receiving airwaves of a desired reception channel; matching control signal generating means (3) for generating a matching control signal corresponding to reception channel selection data supplied from the reception means; and a matching circuit (30) that is so configured that the resonant frequency of the flat antenna is made variable based on the matching control signal outputted from the matching control signal generating means, wherein: the matching circuit (30) comprises a connective circuit (31, 32) including a matching coil (13, 21) and a variable capacitance diode (17, 23), and the resonant frequency of the flat antenna (2) is variably controlled by varying the group including the inductance of the matching coil and the capacitance of the variable capacitance diode.

Regarding claim 9, Urakami et al. teaches in figures 1 and 5-14 the broadcast reception terminal apparatus according to claim 8, wherein: the inductance of the matching coil (13, 21) is varied.

Regarding claim 10, Urakami et al. teaches in figures 1 and 5-14 the broadcast reception terminal apparatus according to claim 8, wherein: the capacitance of the variable capacitance diode (17, 23) is varied based.

Regarding claim 11, Urakami et al. teaches in figures 1 and 5-14 the broadcast reception terminal apparatus according to claim 8, wherein: the group including the inductance of the matching coil (13, 21) and the capacitance of the variable capacitance diode (17, 23) is varied based on the matching control signal.

Response to Arguments

Applicant's arguments filed July 19, 2005 have been fully considered but they are not persuasive.

Applicant argues that Urakami fails to disclose, teach or suggest the resonant frequency of the antenna 1 being variably controlled by varying the inductance of either coil 13, 21. specifically, the coils 13, 21 are not shown to be variable. Moreover, the variability of an inductance is not found within Urakami; and Urakami fails to disclose, teach or suggest the resonant frequency of the flat antenna is variably controlled by varying the inductance of the matching coil and the capacitance of the variable capacitance diode based on said matching control signal. This argument is not deemed to be persuasive because Urakami et al. teaches the matching circuit 30 has variable reactance circuits including its central capacitor 19, and varactor diodes 17 and 23 each disposed on right and left branches. The reactance is controlled by the capacitance of the varactor diodes with the common frequency control voltage supplied from the receiver 6 (See col. 4, lines 62—67).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Chao Chen whose telephone number is (571) 272-1819. The examiner can normally be reached on Monday-Friday from 7 AM to 4:30 PM, First Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shih-Chao Chen
Shih-Chao Chen
Primary Examiner
Art Unit 2821

SHIH-CHAO CHEN
PRIMARY EXAMINER

SXC
September 26, 2005